## THREE NEW TINGIDAE (HEMIPTERA)

By Carl J. Drake
Ames, Iowa

In addition to the description of three new species of Tingidae, this paper briefly discusses and illustrates the type of a rare and unknown cantacaderid from India. The types of the new species have been deposited as stated beneath the descriptions.

> Cyclotynaspis acalyptoides Montandon (Plate 25) Cyclotynaspis acalyptoides Montandon, Rev. d' Ent. 11 (1):256-266. 1892.

Through the kindness of Dr. V. H. Raica, Muzuel de Istorie Naturala, Buceresti. Rumania, I have been able to study the unique type (only known specimen) of the cantacaderid *Cyclotynaspis acalyptoides* Montandon, female, brachypterous, Singapore, India, collected by M. A. Raffray. The following notes are intended to supplement the excellent original description:

Head very long, strongly produced in front of eyes, armed with five spines in front of eyes (fig. 1), without spines back of eyes; eyes very small, reddish. Rostrum very long, stout, extending a little beyond rostral sulcus on basal part of venter, testaceous-brown with apex fuscous. Bucculae wide, long, whitish testaceous, composed of one row of large areolae, subangulately produced in front, the laminae parallel, not curved inwardly, with apex entirely open. Antennae moderately long, slender, testaceous, segments I and II very short, IV slightly swollen, measurements-I, 5; II, 3; III, 32; IV, 17. Hypocostal laminae very narrow, uniseriate. Elytra (fig. 1) ovate, with subcostal and discoidal areas strongly, transversely convex, the areolae subrounded and moderately large; costal area broad, horizontal, triseriate; subcostal area much wider, with five rows of areolae in widest part, the transverse, raised lines scarcely distinguishable; discoidal area large, with a prominent, adventitious, transverse vein in front of middle of both areas, the left side with a second raised vein beyond the middle. Pronotum obliquely narrowed anteriorly, unicarinate, with large punctures more like areolae; collar areolate, truncate in front; calli large, somewhat rugulose; paranota narrow, of equal width throughout, uniseriate. Legs short, with femora a little swollen. Scutellum very small, exposed. Elytra meeting in a straight line within. Length, 1.75 mm.; width,  $1.05 \, \mathrm{mm}$ .

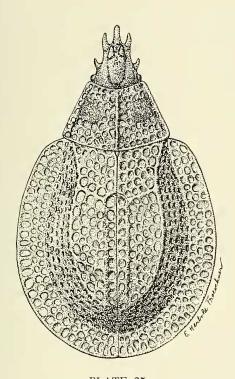


PLATE 25
cyclotynaspis acalyptoides Montandon

## Monanthia patquiana, n. sp.

Small, oblong, brownish testaceous with some veinlets fuscous, with areolae whitish, the dorsal surface clothed with very short, scattered, bright golden pubescence on veinlets. Head dark reddish brown, with five short, blunt, testaceous spines. Antennae testaceous with first two segments brown and last fuscous, measurements—I, 8; II, 8; III, 45; IV, 18. Rostrum brownish, reaching beyond middle of mesosternum; laminae testaceous, uniseriate, the ends meeting behind. Body beneath dark fuscous. Orifice distinct. Hypocostal laminae uniseriate, the areolae becoming smaller posteriorly.

Pronotum slightly convex, brownish on disc, tricarinate; lateral carinae short, present on hind process, not extending to or present

under reflexed paranota; divergent posteriorly; median carina slightly raised, without distinct areolae; collar a little elevated, testaceous, largely biseriate, triseriate at middle; paranota wide, completely reflexed, six areolae deep in widest part, with outer, hind and front margins jointly rounded, the outer margin resting about one areolae removed from median carina. Elytra widest at middle, jointly rounded behind in repose; costal area not very wide, uniseriate, with transverse veinlets thicker and partly fuscous, the areolae clear; subcostal area three areolae deep just in front of and also behind lateral projection of discoidal area; discoidal area extending beyond middle of elytra, with apical part near apex projecting deeply (C-shaped) into subcostal area, there four or five areolae deep at middle of projection, only three or four areolae wide in front of projection; sutural area with areolae slightly larger and some veinlets infuscate.

Length, 2.55 mm.; width, 1.08 mm.

Type (male) and Allotype (female), Patquia, Argentina, Jan. 1, 1933, in British Museum. Paratypes: 2 specimens taken with type, and 1 specimen, La Rioja, Patquia, all by K. J. Edwards.

Separated from *M. parilis* Drake, *M. figurata* Distant and *M. berryi* Drake by the much wider paranota and shape of apical part of discoidal area.

## Lasiacantha discordis, n. sp.

Moderately large, oblong, brownish with paranota, pronotal carinae and costal area more testaceous, the latter with a few veinlets infuscate; areolae large, hyaline. Lateral margins of paranota and elytra, superior margins of carinae, boundary veins of discoidal and vein separating subcostal and discoidal areas armed with numerous sharp spines, the spines on veins separating elytral areas erect, longer and also slenderer. Head convex above, armed above with five slender, moderately long, testaceous spines. Bucculae broad, areolate, with ends contiguous in front. Rostrum reaching between intermediate coxae, testaceous with apex black; laminae whitish, uniseriate, slightly divergent posteriorly, open behind. Antennae slender, testaceous, with two apical segments brown (IV subclavate), rather sparsely beset with long stiff hairs, measurements—I, 8; II, 6; III, 64; IV, 17. Orifice not visible.

Pronotum and carinae sparsely clothed with pale hairs; hood small, tectiform, highest in front; paranota broad, widest opposite humeri, slightly turned up, irregularly biseriate, the areolae large; carinae strongly foliaceous, very high, higher than hood, mostly biseriate, lower and uniseriate behind, the median a little higher than lateral. Elytra widely reticulated, clothed with scattered pale hairs; costal area wide, biseriate, the areolae large, irregular in size, shape and arrangement; subcostal area narrower, mostly biseriate; discoidal area extending a little beyond middle of elytra,

acutely angulate at base and apex, widest a little back of middle, there five areolae deep. Hypocostal laminae uniseriate.

Length, 3.20 mm.; 1.48 mm.

Type (female), Kalgoorie, West Australia, Jan. 28, 1928, H. H. Hacker, in my collection.

This species is much smaller than *L. leai* (Hacker) from eastern Australia. The antennae are slenderer, veinlets thinner and areolae larger than in most species of *Lasiacantha* Stâl.

## Habrochila iolana, n. sp.

Head fuscous, armed with three porrect frontal spines, the hind pair wanting. Bucculae with anterior ends widely separated. Antennae long, slender, testaceous, clothed with fine hairs, the last segment missing, measurements—I, 40; II, 8; III, 110; IV ..... Areolae large, hyaline, the veinlets largely testaceous, two transverse veinlets in paranota and four to six in costal area infuscate. Exterior margins of paranota and elytra clothed with fine, rather short, pale hairs. Hood and inflated posterior process of pronotum with a few, short, pale, stiff hairs.

Hood large, inflated, narrowed in front, extending beyond apex of head but not nearly reaching middle of first antennal segment, the basal length and extreme height subequal (64:60), diameter or width of hind part shorter than height (42:60). Median carina short, high, composed of one large cell, about two-thirds as high as hood, with dorsal boundary vein connecting hood with hind process almost horizontal. Lateral carinae short, very high, not quite as high as hood, strongly concave within, connected behind for about two-thirds of its height with inflated hind process, divided by a median vertical vein into two tall cells. Inflated posterior pronotal process larger than hood, strongly inflated, laterally impressed on both sides behind, measurements-length, 75; width, 54; height, 65. Each elytron with a moderately large tumid elevation, subrounded, with clear areolae, not nearly as large or semiglobose as in H. monticola Horvath, costal area composed of nine or ten moderately large areolae.

Length, 3.75 mm., width, 1.80 mm.

Type (male) and Allotype (female), Perinet, Analamasotra Province, Madagascar, January, 1932, my collection.

Belongs to the species of larger size of *Habrochila* Horvath. Separated from *H. monticola* Horvath by the smaller pale tumid areas of elytra, pale basal antennal segment and smaller hind pronotal process. The presence of cephalic spines, smaller inflated vesicles of pronotum and tumid elevations of elytra distinguishes it from *H. ghesquierei* Schouteden and *H. placida* Horvath *H. africana* Drake is a much smaller species without lateral carinae.